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| 10/802,865 | 03/18/2004 | Philippe Jerome Didier Riviere | 88265-7344 | 5444 |
| 29157 7590 10/19/2007 BELL, BOYD & LLOYD LLP P.O. Box 1135 CHICAGO, IL 60690 | | | EXAMINER CHAWLA, JYOTI | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/802,865 | Applicant(s) RIVIERE ET AL. | |
| | Examiner Jyoti Chawla | Art Unit 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-28 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's amendment filed August 02, 2007 has been entered. Claims 1, 4, and 7 have been amended, claims 17-27 have been withdrawn from consideration as they pertain to a non-elected invention. Claims 1-5, 7-16 and 28 remain pending in and are examined in the application.

Claim Objections

Claim objections identified in the office action Mailed April 5, 2007 have been withdrawn in light of applicant's amendments.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 7-16 and 28 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "glucose polymers representing from 10 to 50% of the weight of the sweetening agent mixture", does not reasonably provide enablement for "the glucose representing from 30 to 40% of the weight of the sweetening agent mixture". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The original disclosure (page 5, paragraph 3 to page 6, paragraph 1) does not support the claim as recited as the specification states, "the polymers constitute 10-50% of the sweetening agents" (page 5, paragraph 3). The disclosure further states "mixture of sweetening agents contains 10-50% of glucose polymers" (page 5, last paragraph) and "it is possible to advantageously use, as glucose polymers, the polymer fraction, which exists in a glucose syrup containing from 30 to 40% by weight of glucose" (Page 6, paragraph 2). Thus as disclosed 10-50% of the sweetening agents is glucose polymer and glucose polymers have 30-40% by

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weight of glucose in the polymer mixture, i.e., 30-40% of the 10-50% (glucose polymer) is glucose, i.e. glucose is about 3-16% of the sweetening agent and not 30-40% as instantly claimed. Thus the claims and disclosure have not been described in a way as to enable one of skill in the art to make or use the invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, rejected under 35 U.S.C. 112, as failing to comply with the enablement requirement. The claim(s) contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case claim 7 recites that the "the sweetening agent mixture further comprises less than 1% by weight of fructose" however in the disclosure it is stated that "it is possible to advantageously use, as glucose polymers, the polymer fraction, which exists in a glucose syrup containing from 30 to 40% by weight of glucose and less than 1% by weight of fructose." Thus as disclosed 10-50% of the sweetening agent is glucose polymer and fructose is present as less than 1% of that glucose polymer and not of the entire sweetening agent mixture". The disclosure also includes other sweetetners like sucrose, where fructose and glucose are included. Thus the disclosure does not support the instant claims as recited.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 -5, 7-16 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 is indefinite for the recitation of "the sweetening agent mixture comprises at least 90% of its weight of a sweetening component comprising glucose polymers and glucose...with the glucose polymers representing from 10 to 50% of the weight of the sweetening agent mixture and the glucose representing from 30 to 40% of the weight of the sweetening agent mixture, wherein the sweetening component constitutes from 6 to

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30% of the total weight of the frozen dessert ". Thus as recited the sweetening agent mixture is at least 90% sweetening component, the sweetening component contains glucose 30-40% and glucose polymers 10-50%. The above description makes the sweetening component as 40-90% and not at least 90% (90% or more, up to 100%) as recited above in the claim. Thus it is unclear if the composition sweetening mixture contains the sweetening component in the amount 40-90% or at least 90% as instantly claimed.

Furthermore, the original disclosure (page 5, paragraph 3 to page 6, paragraph 1) does not support the claim as recited as discussed above.

Claim 1 is indefinite for the recitation of "stabilizing agent comprises a compound *capable of acting* as nucleating agent" It is unclear as to what is encompassed by the phrase "stabilizing agent *capable of acting* as nucleating agent", it is unclear as to what characteristics are necessary in the stabilizing agent in order for it to be considered as capable of acting as a nucleating agent. It is further unclear as to if the stabilizing agent acts as a nucleating agent or simply capable of acting as a nucleating agent. Further, if the stabilizing agent acts as a nucleating agent, it is unclear as to what conditions are necessary, i.e., temp, moisture etc. It is further noted that "stabilizing agent ...freezing temperatures" as recited in claim 1, is suggestive of a method step whereas the claim is addressed to a composition. Clarification and or correction is required.

Further, as stated in the previous office action dated April 5, 2007, it is not clear as to what is the freezing temperature range and what standard of malleability is employed to establish if a frozen dessert product is adequately malleable according to the claim as recited. For the purposes of prior art comparison a frozen dessert composition with microcrystalline cellulose would be considered appropriate to read upon the instantly claimed invention.

Claim 3 recites the limitation "the partially frozen water" in claim 3. There is insufficient antecedent basis for this limitation in the claim.

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Furthermore, claim 3 is indefinite for the recitation of "partially frozen water". It is unclear as to what portion of water is frozen or unfrozen in the composition as claimed. For the purposes of prior art comparison frozen dessert composition comprising water in the range recited by the applicant (Claim 3) would be considered appropriate to read upon the instantly claimed invention. It is further noted that "partially frozen water", is suggestive of a method step whereas the claim is addressed to a composition.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(A) Claim 1-5, 9-16 and 28 are rejected under 35 U.S.C. 103(a) as being obvious over Whelan et al (US 5,084,295) in view of Hilker (US 3128193).

The references and rejection are incorporated herein and as cited in the office action mailed April 5, 2007.

Regarding the newly added limitations, Whelan teaches of a frozen dessert composition comprising of water, proteins, fat, sweetening agents and stabilizing agents (Abstract and Column 6, lines 1-8, lines 31-38). Regarding the sweetening agents Whelan teaches of sweetener in the instantly claimed range (column 5, lines 30-32 and 45-48). Where the sweeteners include glucose, fructose, maltose, corn syrups etc. as discussed on pages 4-6 of the previous office action dated April 5, 2007).

Regarding the new amendment to claims about glucose representing 30-40% of the sweetening agent mixture, the applicant is referred to the 112 rejections above.

Regarding the sweetener in the ice cream composition, Whelan teaches of 10-20% nutritive sweetener, and also teaches that glucose as well as corn syrup as sweeteners. Corn syrup is also known as glucose syrup. The corn syrup as taught by Whelan is has a value of 62 DE, i.e., depending on the method of hydrolysis of starch the glucose (dextrose) content of the corn syrup would vary from 36 to 39% on dry weight basis (as evidenced by Handbook of Industrial chemistry, pages 188-189 table

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6.2). Based on the above information the glucose content of the glucose syrup lies within the 30-40% of the corn syrup (glucose polymers) content, as instantly claimed. Further, it is noted that 36-39% of glucose in the sweetener component (10-20% of the composition) as taught by Whelan would account for 3.6 to 7.8% of glucose in the ice-cream composition, which also falls within 1.8 to 12% by weight of glucose in the ice-cream composition (i.e., 30-40% of the total sweetener content 6-30% = 1.8 to 12% of glucose) as instantly claimed.

Furthermore Hilker teaches of sweetening agents as sucrose and corn syrup solids (Column 3, Lines 53-60, Example I). Sucrose is a polymer of glucose, i.e., $n=2$, as recited by the applicant in claim 1. Corn syrup solids are dextrose, i.e., glucose. Thus Hilker teaches the sweetener agents that are used together (i.e., a mixture) which comprise 100% of the sweetener mixture, which is in the recited range of (at least 90%) the applicant. Hilker teaches the frozen confection composition where 10-12% sucrose and 7.5-8% corn syrup solids, i.e., 17.5-20% sweetener (Columns 3 and 4, Examples I and II), wherein glucose amounts to 50% of the sucrose content and also as dextrose in the corn syrup solids. Thus the amount of glucose falls in 50% or higher of the sweetener composition which also falls in the instantly claimed range. Thus the amount of glucose taught by Hilker and Whelan fall within the instantly claimed range of the applicant. Further it is noted that glucose is less sweet as compared to sucrose as well as fructose and has negative heat of solution thus it provides cool sensation when consumed. Glucose syrups are also highly hygroscopic and provide smooth texture to foods.

Thus sweetener mixtures with glucose and glucose polymers (corn syrups, corn syrup solids and dextrose and glucose were known at the time of the invention (Whelan and Hilker). Sweetener mixture with any combination of glucose and polymers were also known in making of ice cream type frozen confections, at the time of the invention (Whelan). Relative proportion of glucose and glucose polymers in the range recited by the applicant was known at the time of the invention (Whelan and Hilker). It was also known that glucose is less sweet as compared to sucrose and fructose on a weight basis. Further it was known that glucose provides cooling sensation in mouth when

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consumed. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to modify Whelan and add sweetener comprising glucose and its polymers in the relative proportion as taught by Hilker, in order to make a frozen dessert with the desired combination of sweetening agents. One would have been further motivated to do so in order to have a hygroscopic sweetener component in the frozen dessert which would enhance the smoothness of the texture of the finished frozen product. One would have been further motivated to do so in order to make the frozen confection with an enhanced cooling effect in the mouth when consumed. Also a set proportion of glucose in the sweetener mixture would be able to provide a frozen dessert product with a certain degree of characteristic glucose sweetness irrespective of the other sweeteners used.

Claims 2-5, 9-16 and 28 remain rejected for the reasons of record.

Regarding the amendment to claim 7, wherein the sweetening mixture further comprises of less than 1% fructose, the applicant is referred to the 112 rejection above. Regarding claim 7, Whalen teaches of fructose as part of the sweetener composition (column 12, line 6). Whalen and Hilker are silent regarding the percentage of fructose being less than 1% in the sweetening mixture of the composition. However, glucose (dextrose), fructose and sucrose or sugar were known as sweeteners at the time of the invention. It was also known at the time of the invention that fructose is sweeter than sucrose, which in turn is sweeter than glucose on an equivalent weight basis. Therefore it would have been a matter of routine optimization experimentation for one of ordinary skill in the art at the time the invention was made to substitute one art recognized functional equivalent (i.e. sucrose or glucose or fructose) for another (i.e., a sweetener with less than 1% fructose) in the frozen confection as disclosed by Whelan, depending on the desired level of sweetness in the frozen product. One would have been further motivated to include less fructose in order to make the frozen confection with less sweetness. One would have been further motivated to reduce the amount of fructose based on which sweeteners were more desirable and available at the time the invention was made.

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(B) Claim 8 is rejected under 35 U.S.C. 103(a) as being obvious over Whelan et al and Hilker as applied to claims 1-5, 7, 9-16 and 28 above further in view of Cole et al. (US 4,452,824).

The references and rejection are incorporated herein and as cited in the office action mailed April 5, 2007.

(C) Claims 1-5 and 9-14, 16 and 28 are rejected under 35 U.S.C. 103(a) as being obvious over Morley (US 4,427,701) in view of Cole et al (US. 4,452,824).

The references and rejection are incorporated herein and as cited in the office action mailed April 5, 2007.

Regarding the newly added limitations to claims 1 and 7 Morley teaches of sweeteners like corn syrup, corn syrup solids and dextrose (glucose) in varying amounts in the sweetening mixture for the frozen confection (Column 6, lines 33-58). Morley teaches that part of sorbitol can be replaced with dextrose (glucose). Morley also teaches of 8.5% 36 DE corn syrup solids (contain about 10% glucose) and 12.5% sorbitol (Column 9, Example 1). In another example Morley also teaches of 7% 36 DE corn syrup solids and 3.8% 24 DE corn syrup solids and 12.2% sorbitol (Column 10, Example 2), thus the reference teaches of varying amounts of dextrose or glucose. Morley also teaches of varying amounts of fructose 3.8-4.3% of the composition (Columns 9-10, examples 1 and 2). Morley also teaches of blending of sweeteners in accordance with the properties desired in the finished product, e.g., in fat free compositions, corn syrup with low DE is added in addition to the regular corn syrup (Column 6, lines 38-44). Thus altering the sweetener amount and also the kind of sweetener based on the characteristics desired in the finished product was well known in the art at the time of the invention. Therefore, it would have been a matter of routine experimentation and determination for one of ordinary skill in the art to modify Morley and alter the sweetener mixture by increasing the amount of (glucose) dextrose to 30-40% of the sweetener composition and also decreasing the amount of fructose in the sweetener to less than 1% of the sweetener

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mixture in order to make the finished product with the desired flavor, texture or intensity of sweetness. One of ordinary skill would have been motivated to do so in order to make the finished product with desirable taste and texture without excessive sweetness (e.g., of fructose and some non-nutritive sweeteners) or an undesirable aftertaste. Therefore, modifying the relative amounts of sweeteners in the frozen confection composition does not lend patentable distinction to the claims, absent any clear and convincing evidence and/or arguments to the contrary.

Response to Arguments

Applicant's arguments filed August 2, 2007, regarding the rejection of claims 1-5, 7-16 have been fully considered but have not been found persuasive.

Regarding the claim objections and claim rejections under 35 USC112, applicant is referred to the office action above.

I) In response to applicant's arguments against the references individually (Remarks, page 9, paragraphs 2 and 3), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case Whelan teaches of a frozen confection composition with sweetener, water, protein, fat, emulsifier, thickeners and stabilizing agents in the instantly claimed ranges. Whelan also teaches of glucose polymers and glucose (dextrose), and glucose syrup as part of the sweetener composition, where the amount of glucose falls in the instantly claimed range. Regarding applicant's argument that Hilker does not teach of glucose or glucose polymers (Remarks, page 9, paragraph 3), applicant is referred to Columns 3 and 4 of Hilker where Hilker teaches of corn syrup solids, i.e., dextrose or glucose in the amounts ranging from 7.5-8% of the frozen confection which falls in the instantly claimed range of 6-30% for the total sweetener and 1.8 to 12% for glucose as discussed in the office action above. Thus the reference also teaches that higher proportion of glucose was known to be used as sweetener in the art of making frozen confections

Thus the references teach of frozen confections with glucose content in the instantly claimed range.

Regarding fructose Whelan teaches of sweetener comprising fructose, however Whelan does not teach of fructose comprising less than 1% of the sweetener as instantly claimed, however, fructose and glucose have been known in the art for their respective sweetness characteristics, therefore to substitute one functional equivalent for another would have been a matter of routine determination for one of ordinary skill at the time of the invention. Therefore using more glucose and less fructose in a frozen confection composition does not impart patentable distinction to the claims absent any clear and convincing evidence and/or arguments to the contrary.

II) Regarding applicant's response that the references do not teach "glucose representing 30-40% of the sweetening agent mixture" (Remarks, page 9), the applicant is referred to the rejections under 35 USC 112 and 35 USC 103(a) above.

III) Regarding applicant's comment about applicant's observation that glucose makes the frozen dessert more malleable (Remarks, page 9, paragraph 2), the applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further it is noted that applicant's remarks state that the glucose makes the frozen confection more malleable, however, it is unclear as to what standard of malleability ~~is~~ the instantly claimed product^{is} being compared.~~to~~

IV) Applicant's argument that "recited ranges as claimed in the independent claim 1 achieve unexpected results relative to the prior art range" (Remarks, page 9 and page 11) has not been found persuasive because the prior art references (Whelan and Hilker) include glucose amounts that fall within the instantly claimed range of claim 1. Thus if the amount of total sweetener and relative amount of glucose in the frozen confection in the prior art is in the recited range, then the sweetening and texturizing effects of glucose

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in the prior art would also be similar to the ones in the instantly claimed invention. Therefore, one of ordinary skill would not only have motivation to add glucose in the instantly claimed range but also have a reasonable expectation of success of achieving the textural and sweetening characteristics similar to the instantly claimed invention, absent any clear and convincing evidence and or arguments to the contrary.

V) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies, i.e., the surprising reduction of proportion of fat without limiting the malleability of the dessert (Remarks, page 10, paragraphs 2-3 and page 11, paragraph 1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

VI) Applicant's arguments regarding Morley have also been considered and responded to in the office action above.

Therefore, applicant's arguments have been considered and have not been found persuasive and the claims 1-5, 7-16 and 28 remain rejected for the reasons of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

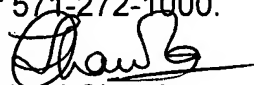
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jyoti Chawla
Examiner
Art Unit 1794


KEITH HENDRICKS
PRIMARY EXAMINER